

TOUCH SENSING WITH TOUCH DOWN AND LIFT OFF SENSITIVITY

Abstract

A touch sensing device includes a plurality of sensors and an emitting transducer coupled to a touch panel. The transducer induces bending waves in the touch panel. The sensors sense bending waves in the touch panel and generate a bending wave signal responsive to the sensed bending waves. A controller identifies an untouched condition signal responsive to the induced bending waves. The controller compares the untouched condition signal to the bending wave signal, and detects a touch on the touch panel based on the comparison.